

**WHAT IS CLAIMED IS:**

1. A synchronous vehicle detector system comprising;  
a plurality of vehicle detectors each having least one vehicle loop  
to which that detector can be intermittently couple for vehicle sampling  
5 purposes; and  
means for synchronizing the operation of said plurality of vehicle  
detectors.
- 10 2. The invention of claim 1 wherein said means for  
synchronizing comprises circuitry incorporated in said vehicle detectors  
for enabling one of said vehicle detectors to control the synchronous  
operation of said plurality of vehicle detectors.
- 15 3. The invention of claim 1 wherein said vehicle detector system  
is configured for series synchronization.
4. The invention of claim 1 wherein said vehicle detector system  
is configured for parallel synchronization.
- 20 5. A method of controlling the operation of a plurality of vehicle  
detectors in a synchronous manner, said method comprising the steps  
of:
  - (a) assigning one of said detectors the role of master detector;  
and
  - (b) operating the remaining number of vehicle detectors as  
25 slave detectors to the master.
6. The method of claim 5 wherein said step (b) is performed in  
series synchronization.
- 30 7. The method of claim 5 wherein said step (b) is performed in  
parallel synchronization.